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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,727	01/27/2004	Roland Gallay	M101US	3438

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Maxwell Technologies, Inc.
Att. Intellectual Property Dept.
9244 Balboa Ave.
San Diego, CA 92123

EXAMINER

HA, NGUYEN T

ART UNIT PAPER NUMBER

2831

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/766,727

Applicant(s)

GALLAY ET AL

Examiner

Nguyen T Ha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/19/2005 have been fully considered but they are not persuasive.

2. With respect to claim 19, the applicant has argued that **Sakata** failed to provide an analysis or comparison of structures as required under *In re Donaldson*. The examiner disagrees with this argument.

Under *In re Donaldson* state: "Disclosure may be express, implicit or inherent. Thus, at the outset, Office personnel must attempt to correlate claimed means to elements set forth in the written description. The written description includes the original specification and the drawings. **Office personnel are to give the claimed means plus function limitations their broadest reasonable interpretation consistent with all corresponding structures or materials described in the specification and their equivalents including the manner in which the claimed functions are performed.** See *Kemco Sales, Inc. v. Control Papers Company, Inc.*, 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000). Further guidance in interpreting the scope of equivalents is provided in MPEP § 2181 through § 2186. While it is appropriate to use the specification to determine what applicant intends a term to mean, a positive limitation from the specification cannot be read into a claim that does not impose that limitation. **A broad interpretation of a claim by Office personnel will reduce the possibility that the claim, when issued, will be interpreted more broadly than is justified or intended. An applicant can always amend a claim during prosecution to better**

reflect the intended scope of the claim". Therefore, the examiner interpreted the claimed in the broadest way, which is included all the claimed limitations as taught by Sakata.

3. With respect to claims 18 and 21, the applicant has argued that **Noguchi** failed to disclose a battery-sized housing. The examiner disagrees with this argument.

Noguchi et al. disclose a double layer capacitor (1) and the housing (2). The examiner knowledge that the housing as taught by Noguchi et al. having a cylindrical shaped which is identical to the battery sized housing. Moreover, the examiner knowledge that the battery have been made by the double layer capacitor, therefore, the double layer capacitor as taught by Noguchi et al. could be use for the battery as well.

4. With respect to claims 1 and 17, the applicant has argued that Sakata in view of Harats failed to suggest or motivate for the combination.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Sakata et al. teach an electric double layer capacitor and battery, while Harats et al. teach a battery having a housing with a size corresponding to a standard cell size. Therefore, it is

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reasonable to combine these two references; since the double layer capacitor and battery as taught by Sakata could be use in the housing of Harats et al.

The remains claims are dependency; they are rejected for the same reasons.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Sakata et al. (US 6,870,725).

Regarding claim 19, Sakata et al. disclose a capacitor comprising a double layer capacitor (20) and housing means (22) for housing the double layer capacitor (figure 5).

7. Claims 18 and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Noguchi et al. (US 6,433,997).

Regarding claim 18, the method steps of making a battery-sized capacitor are inherent in the structure device as disclosed by Noguchi et al. Noguchi et al. disclose:

- providing a double layer capacitor (1);
- providing a battery sized housing/vessel (2), the housing including an open end (column 2, lines 41-42);

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- inserting the double layer capacitor into the open end of the housing (figure 1); and
- sealing the open end of the housing (column 2, lines 41-42).

Regarding claims 21 & 23, Noguchi et al. disclose a battery sized energy storage device/double-layer capacitor (figure 1) comprising:

- a housing (2, column 2, line 39); and
- a rolled electrode (3, column 2, line 39), the rolled electrode including two collectors (11 & 14, column 5, lines 18-19), wherein the two collectors and the housing comprise substantially the same metal (column 2, line 50 and 59-60 and column 3, lines 24-25), wherein the collectors (11 & 14) are coupled to the housing to form an electrical connection (figure 1).

Regarding claim 22, Noguchi et al. disclose the electrical connection providing a polarity independent path for application of energy to the energy storage device (figure 2).

Regarding claim 24, Noguchi et al. disclose the electrical connection being able to receive energy with positive or negative polarity (6 or 7, figure 1).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakata et al. (US 6,870,725) in view of Harats et al. (US 5,554,918).

Regarding claim 1, Sakata et al. disclose a capacitor/battery comprising:

- a housing (22);
- a capacitor cell (20), the cell disposed in the housing and electrically coupled to the housing (figure 5).

Sakata et al. fail to teach the housing having dimensions that conform to standardized battery dimensions.

Harats et al. teach a battery having a housing with a size corresponding to a standard cell size (column 4, lines 27-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery housing of Harats et al. in Sakata et al. in order to enable the battery to be used in a device accepting standardized battery configurations and reduce the cost for the manufacture.

Regarding claims 2-5, **Harats et al. further teach** the housing comprises a standard D-cell sized battery (claim 2), C-cell sized battery (claim 3), AA-cell sized battery (claim 4) and an AAA-cell sized battery (claim 5) form factor (column 4, lines 27-30).

Regarding claim 6, Sakata et al. further disclose the housing comprises one or more connectors/terminals (32), wherein the connectors adapted for connection with an electrical circuit

Regarding claim 7, Sakata et al. discloses the capacitor cell comprises a double-layer capacitor (figure 1).

Regarding claim 8, Sakata et al. disclose the double-layer capacitor comprising a dry particle based electrode/carbon electrode (column 6, lines 27-28).

Regarding claim 9, the teaching of Harats et al. includes the double-layer capacitor comprises a dry particle based rolled electrode (figure 1).

Regarding claim 10, Sakata et al. disclose the double layer capacitor includes two collectors (13), wherein the collectors are electrically coupled to the housing wherein the two collectors and the housing comprise substantially the same metal.

Regarding claim 11, the teaching of Harats et al. includes the capacitor comprising a nominal maximum operating voltage of about 4.5V (column 5, lines 11-14, which is within the claimed range).

Regarding claim 12, Sakata et al. disclose the capacitor comprises a capacitance of about 0.1 Farad or above (column 14, lines 36-38).

Regarding claims 13-14, the teaching of Harats et al. includes the capacitor comprises a specific energy density at about 2.5 volts (column 3, lines 59-61, which is within the claimed range).

Regarding claim 15, the teaching of Sakata et al. in view of Harats including all the claimed limitations discussed above with respect to claim 2 above, except for the housing comprising an outer diameter of 33 ± 0.1 mm and a height of 61.5 ± 0.2 mm. It would have been an obvious matter of design choice to have the housing comprise an outer diameter of 33 ± 0.1 mm and a height of 61.5 ± 0.2 mm, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claim 16, Sakata et al., as modified, show all the claimed limitations with respect to claim 1 above. Harats et al. further teach the housing comprises a standardized power tool battery sized form factor (column 4, lines 27-28).

Regarding claim 17, Sakata et al. disclose a double layer capacitor (figure 1) comprising:

- a housing (22);
- a double layer capacitor (20) electrically coupled to the housing within the housing (figure 5).

Sakata et al. fail to teach the housing comprising dimensions that conform to standardized battery dimensions.

Harats et al. teach a battery having a housing of a size corresponding to a standard cell size (column 4, lines 27-35).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery housing of Harats with Sakata et al. capacitor cell in order to enable the battery to be used in a device accepting standardized battery configurations and reduce the cost for the manufacture.

Regarding claim 20, Sakata et al. discloses all the claimed limitations discussed above with respect to claim 19, except for the housing means comprises a battery form factor sized housing.

Harats et al. teach a housing means comprising a battery form factor sized housing (column 4, lines 27-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery housing of Harats with Sakata et al. capacitor cell in order to enable the battery to be used in a device accepting standardized battery configurations and reduce the cost for the manufacture.

10. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi et al. (US 6,433,997) in view of O'phelan et al. (US 6,509,588).

Regarding claim 25, Noguchi et al. disclose all the claimed limitations discussed above with respect to claim 21, except for the electrical connection comprising a laser weld.

O'phelan et al. teach a capacitor having connection members 206 and 306 being laser edge-welded (column 7, lines 36-37).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the laser weld of O'phelan with Noguchi for welding the connection in order to prevent damage to the connection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T Ha whose telephone number is 571-272-1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Nguyen T. Ha', with a long horizontal stroke extending to the right.

Nguyen T. Ha
March 14, 2006